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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,463	12/20/2005	Johannis Friso Rendert Blacquiere	NL 030757	8223
	7590 10/06/200 LLECTUAL PROPER	EXAMINER		
P.O. BOX 3001		DILLON, SAMUEL A		
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		2185		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Ар	Application No. Applicant		Applicant(s)	nt(s)			
		10	)/561,463		BLACQUIERE ET AL.				
Office Action Summary			aminer		Art Unit				
		SA	MUEL DILLON		2185				
Period fo	The MAILING DATE of this commu or Reply	nication appears	on the cover	sheet with the c	orrespondence ad	ddress			
A SH WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAISTON SIX (6) MONTHS from the mailing date of this come period for reply is specified above, the maximum sere to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE s of 37 CFR 1.136(a). munication. tatutory period will app y will, by statute, caus	OF THIS CO In no event, however oly and will expire S e the application to	MMUNICATION ver, may a reply be tim IX (6) MONTHS from become ABANDONE	I. lely filed the mailing date of this of (35 U.S.C. § 133).				
Status									
	Responsive to communication(s) file	ed on 20 Decer	mher 2005						
2a)□	Responsive to communication(s) filed on <u>20 December 2005</u> .  This action is <b>FINAL</b> .  2b) This action is non-final.								
3)□		<i>′</i> —			secution as to the	e merits is			
<u>ا</u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	Claim(s) <u>1-13</u> is/are pending in the	application.							
•	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
·	☐ Claim(s) is/arc allowed.  ☐ Claim(s) <u>1-13</u> is/arc rejected.								
· ·	Claim(s) is/are objected to.								
•	8) Claim(s) are subject to restriction and/or election requirement.								
Applicati	on Papers								
9)□	The specification is objected to by the	ne Examiner							
,—			a)⊠ accepted	d or b)□ objecte	ed to by the Exar	miner.			
٠٠/	10)☑ The drawing(s) filed on <u>20 December 2005</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
				-		:FR 1 121(d)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority ι	ınder 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the International Bureau (PCT Rule 17.2(a)).								
* 5	* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)									
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>3/13/07</u> .			Notice of Informal Pa Other:	atent Application				
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#### **DETAILED ACTION**

1. The Examiner acknowledges the applicant's submission of the preliminary amendment dated <u>December 20, 2005</u>. Per the amendment, Claim 3 has been amended. The instant application having Application No. <u>10/561,463</u> has a total of 13 claims pending in the application; there are 2 independent claims and 11 dependent claims, all of which are ready for examination by the examiner.

#### I. INFORMATION CONCERNING OATH/DECLARATION

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. ' 1.63.

# II. STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION

3. As required by M.P.E.P. '201.14(c), acknowledgment is made of applicant's claim for priority based on an application filed in <u>June 23, 2003</u>.

# III. ACKNOWLEDGEMENT OF INFORMATION DISCLOSURE STATEMENT

4. The information disclosure statement (IDS) submitted on March 13, 2007 is in compliance with the provisions of 37 CFR 1.97. As required by M.P.E.P. '609 (C), the applicant's submission of the submitted IDS is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P. '609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

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### IV. OBJECTIONS TO THE APPLICATION

5. **Claims 1-13** are objected to because of the following informalities:

- a. <u>Claim 1</u> begins "Device" and should be amended to begin "A device".
- b. <u>Claims 2-11</u> begin "Device" and should be amended to begin "The device".
- c. <u>Claim 11</u> reads "include a command for a indicating" and should be amended to read "a command for indicating".
- d. <u>Claim 12</u> begins "Method" and should be amended to begin "A method".
- e. <u>Claim 13</u> begins "Computer" and should be amended to begin "A computer". Appropriate correction is required.
- 6. <u>Claim 13</u> is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) the place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. If the Applicant would like to claim a computer program product that corresponds to <u>Claim 12</u>, then <u>Claim 13</u> should be amended to be an independent claim similar to <u>Claim 12</u> with the additional limitations included in <u>Claim 13</u>. Appropriate correction is required.

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### V. <u>REJECTIONS NOT BASED ON PRIOR ART</u>

#### Claim Rejections - 35 USC ' 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. <u>Claim 7</u> is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. <u>Claim 7</u> reads "on substantially adjacent physical addresses". The term "substantially" is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purposes of further examination, the Examiner will interpret the logically continuous series of blocks being on physical addresses, but not requiring any specific locality of the physical addresses with respect to each other.

#### Claim Rejections - 35 USC ' 101

9. The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. <u>Claim 13</u> is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. <u>Claim 13</u> is directed towards a computer program product for recording information, or software, per se. Software does not fall within any of the four categories of statutory subject matter, and as such, the claim appears directed towards non-statutory subject matter.

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### VI. REJECTIONS BASED ON PRIOR ART

#### Claim Rejections - 35 USC '102 - Shagam

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. <u>Claims 1, 2, 5, 7-9 and 11-13</u> are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Shagam</u> (US Patent 6,205,529).
- 13. As per <u>Claims 1 and 12</u>, but more specifically to <u>Claim 1</u>, <u>Shagam</u> disclose(s) a device (entirety of figure 1a) for recording information in blocks having logical addresses in a storage space on a record carrier, which device comprises

recording means (22) for recording marks in a track on the record carrier representing the information (disk subsystem 30, figure 1a), and

control means (20) for controlling the recording by locating each block at a physical address in the track (control logic 10, figure 1a), the control means comprising interfacing means (31) (interface portion of control logic 10 that communicates with host 00, figure 1) for communicating with a host system (host 00, figure 1) by exchanging commands and information,

record carrier status means (32) for detecting a record carrier update status in which information stored on the record carrier is to be changed (control logic 10 generally controls updates to the disk, and also controls the copy function, all of which are commands or functions that are run remotely from the host; therefore, there is inherently a portion of control logic 10 that detects whether there is a command or function to be run as commanded by the host, column 4 lines 6-11), and

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update means (33) (defragmentation program 04, figure 1a) for initiating an unmount-mount sequence in dependence on the record carrier update status, the unmount-mount sequence comprising an unmount process for, via the interfacing means, forcing the host system to complete pending actions and write any information maintained by the host to the record carrier (the host generally communicates updates and writes to control logic 10, figure 1a, column 4 lines 6-11), an update process for said changing of information on the record carrier (copy function, figure 2 elements 260-290), and a mount process for, via the interfacing means, forcing the host system to accept the changed information by retrieving from the updated record carrier any information required by the host (signal successful completion 310, once the copy is completed the host is 'forced' to accept the moved information if that information is read in the future, figure 2).

- 14. As per <u>Claim 2</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 1</u>, wherein the update means (33) are adapted for including in the update process changing the size of the storage space (figures 2, 4a-4d).
- 15. As per <u>Claim 5</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 1</u>, wherein the record carrier status means (32) are for detecting a series of blocks having a continuous logical address range to be updated for recording in a corresponding contiguous physical address range (*figures 2, 4a-4d;*).
- 16. As per <u>Claim 7</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 1</u>, wherein the update means (33) are adapted for including in the update process rewriting blocks that are part of a logically continuous series of blocks on substantially adjacent physical addresses (*figures 2*, 4a-4d).

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17. As per <u>Claim 8</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 7</u>, wherein the update means (33) are adapted for including in the update process adapting file management information (figure 2).

- 18. As per <u>Claim 9</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 8</u>, wherein the update means (33) are for detecting a free location on the record carrier, for retrieving previously recorded blocks in a physical address range, for recording said retrieved previously recorded blocks in the free location, and for updating file system information indicating the logical addresses of said retrieved previously recorded blocks as part of a file (*figures 2, 4a-4d*).
- 19. As per <u>Claim 11</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 1</u>, wherein the interfacing means (31) are adapted to include a command for a indicating a period of time required for the update process, in particular a conditional unmount request (an initiation of the copy command indicates that for a period of time this copy command must be executed, Figure 2 elements 260-290).
- 20. As per <u>Claim 13</u>, <u>Shagam</u> disclose(s) a computer program product for recording information, which program is operative to cause a processor to perform the method as claimed in <u>Claim 12</u> (defragmentation program 04, column 4 lines 1-20).

### Claim Rejections - 35 USC ' 103 - Shagam and Deyring

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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22. Claims 3, 4, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shagam (US Patent 6,205,529) in view of Deyring (US Patent 5,075,804).

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23. As per <u>Claim 3</u>, <u>Shagam</u> disclose(s) the device as claimed in <u>Claim 1</u>, but not the further limitations of <u>Claim 3</u>. Deyring discloses defect management means (34) for detecting defects and maintaining the defect management information in defect management areas on a record carrier (*steps 84-88*, *figure 3a*), and changing the content, size and/or location of the defect management areas (*steps 70-82*, *figure 3a*).

Shagam and Deyring are analogous art in that they deal with formatting hard disk drives. At the time of the invention, it would have been obvious to modify Shagam to use Deyring's defect management table to skip defective sectors. The motivation for doing so would have been that it substantially reduces the amount of defective data on the disk (column 4 lines 4-20). Therefore, it would have been obvious to modify Shagam to use Deyring's defect table and skipping for the benefit of data integrity, to obtain the invention of Claim 3.

- 24. As per <u>Claim 4</u>, <u>Shagam</u> and <u>Deyring</u> disclose(s) the device as claimed in <u>Claim 3</u>, wherein the defect management information at least includes remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area, and wherein the update means (33) are adapted for including in the update process changing the remapping information (*Deyring*, steps 94-106, figure 3a).
- 25. As per Claim 6, Shagam and Deyring disclose(s) the device as claimed in Claim 5, wherein the record carrier status means (32) are for detecting a recording indicator in a recording command which includes a series of blocks of data (column 1 lines 13-20; column 4 lines 1-20). Shagam does not explicitly disclose these blocks representing real-time information, in particular video information. However these differences are only found in the nonfunctional

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descriptive material and do not change how the invention functions. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Circ. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store real-time information or video information because the subjective interpretation of the data does not patentably distinguish the claimed invention.

26. As per <u>Claim 10</u>, <u>Shagam</u> and <u>Deyring</u> disclose(s) the device as claimed in <u>Claim 1</u>, wherein the update means (33) are adapted for including in the update process adapting record carrier information (*figures 2, 4a-4b*). Shagam does not explicitly discloses this information being format information, in particular the disc type or the version of the format of the recorded information. However these differences are only found in the nonfunctional descriptive material and do not change how the invention functions. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Circ. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify format information, disc type or the format version information because the subjective interpretation of the data does not patentably distinguish the claimed invention.

### X. CLOSING COMMENTS

#### a. STATUS OF CLAIMS IN THE APPLICATION

27. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. '707.07(i):

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### a(1). CLAIMS REJECTED IN THE APPLICATION

28. Per the instant office action, <u>Claims 1-13</u> have received a first action on the merits and are subject of a first action non-final.

#### b. DIRECTION OF FUTURE CORRESPONDENCES

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Dillon whose telephone number is 571- 272-8010. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on 571-272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

# **IMPORTANT NOTE**

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sam Dillon Examiner Art Unit 2185

SAD

/Sanjiv Shah/

Supervisory Patent Examiner, Art Unit 2185